# FGDC Annual Report to OMB
## Format for Agency Reports – FY 2003

The following outline should be used by FGDC Member Agencies (or Bureaus) for their Annual Spatial Data Reports, which will be consolidated by the FGDC and submitted to OMB. Reports **should be brief, using bullets where possible**. Please provide only the information that will be useful for OMB to assess the agencies' achievements and for establishing future direction.

## Part A
## GENERAL FEDERAL AGENCY RESPONSIBILITIES REPORT (All Agencies)

1. Agency or Bureau: NASA

2. Name of Contact for Report: Myra Bambacus Email: myra.j.Bambacus@nasa.gov Phone #: 301.286.3215

3. Steering Committee Member: Ronald J. Birk Email: rbirk@hq.nasa.gov Phone #: 202-358-2287

4. Coordination Group Participant(s): Myra Bambacus Email: myra.j.Bambacus@nasa.gov Phone #: 301.286.3215

5. Subcommittee or Working Group Participation (Subcommittees or Working Groups your agency is involved with, but does not lead).

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|---|---|---|---|
| Geologic Data SC | Ms Nancy Maynard | 301-614-6572 | Nancy.g.maynard.1@gsfc.nasa.gov |
| Soil Data SC | Dr Elissa Levine | 301-614-6654 | elissa@ltpmail.gsfc.nasa.gov |
| Vegetation SC | Dr Ross Nelson | 301-614-6632 | ross@ltpmail.gsfc.nasa.gov |
| Biological Data WG | Mr John Schnase | 301-286-4351 | schnase@gsfc.nasa.gov |
| Clearinghouse WG | Ms Lola Olsen | 301-614-5361 | olsen@gcmd.gsfc.nasa.go |
| Earth Cover WG | Ms Martha Maiden | 202-358-1078 | mmaiden@mail.hq.nasa.gov |
| Standards WG | Mr Ben Kobler | 301-614-5231 | ben.kobler@gsfc.nasa.gov |
| Sustainable Forest Data WG | Mr Ed Sheffner | 202-358-0239 | ESheffne@mail.hq.nasa.gov |
| Homeland Security | Mr. Steve Ambrose | 202-358-1599 | sambrose@mail.hq.nasa.gov |
| Civil Imagery &Remote Sensing WG | Mr. Ron Birk | 202-358-0259 | rbirk@hq.nasa.gov |
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6. Strategy: Has your agency prepared a detailed strategy for integrating geographic information and spatial data activities into your business process - in coordination with the FGDC strategy, pursuant to OMB Circular A-16? If yes, briefly describe.

The following NASA strategies exist:
- Global Change Master Directory
  http://gcmd.gsfc.nasa.gov/Aboutus/standards/index.html

- NASA Earth Science Enterprise Statement on Data Management http://www.earth.nasa.gov/visions/data-policy.html
- NASA Earth Science Enterprise Applications Division
- Geospatial Interoperability Office (GIO) coordinates agency-wide FGDC participation. http://gai.fgdc.gov.

7. Compliance: How are your spatial data holdings compliant with FGDC Standards? Also, please list the FGDC Standards you are using or plan to use in your organization.

- FGDC Content Standard for Digital Geospatial Metadata
- Remote Sensing Extensions for FGDC Metadata
- FGDC Swath Content Standard:

8. Redundancy: Prior to collecting data, how does your agency ensure that the data are not already available?

- Program Formulation activities for new missions (new data-gathering spacecraft) include assessments of need for the data to be collected.
- NASA participates through the International Committee on Earth Observations Satellites (CEOS), the National Research Council and FGDCs, Civil Imagery and Remote Sensing Working Group to ensure that planned acquisitions contain data not already available.

9. Collection: Do your agency contracts and grants involving data collection include costs for NSDI standards?

   Yes

10. Clearinghouse: Is all the data and/or metadata that your agency is able to share with the public published on the NSDI Clearinghouse? If not, please cite barriers encountered.

- All datasets we make publicly available are published in GCMD Clearinghouse node.

11. E-Gov: How are you using geospatial data in your mission activities to provide better services? (Please list)

- Gathering and disseminating Earth Science geospatial data (with particular interest in Wind, Climate and Natural Hazards) is a principal NASA function, rather than an adjunct to agency business practices or public services.
- Interoperability standards are being promoted as a way to improve data dissemination.
- NASA data is distributed by it's DAACs as well as USGS' EROS Data Center and NOAA's CDS
- Landsat-7 producing 150 Gbytes of data per day
- * Terra spacecraft produces 194 Gbytes/day:

- * When spacecraft data are processed to higher level products, Terra results in more than 1 Tbytes being added to the archive per day
- *Terra instruments have greatly increased NASA's Earth Science data holdings.

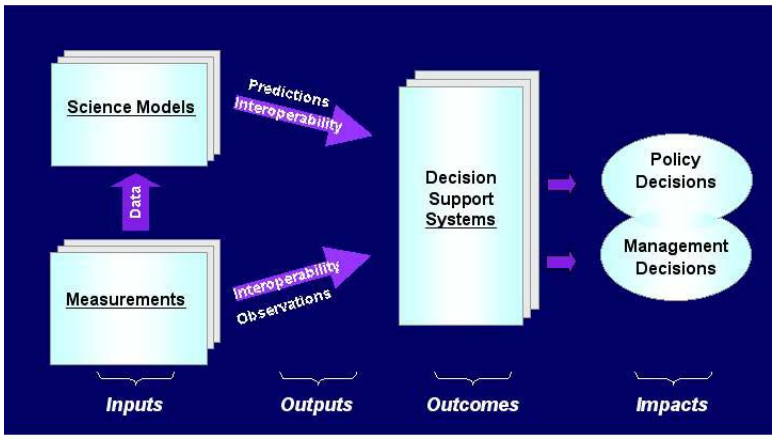
12. Geospatial One-Stop: How is your agency involved in the Geospatial One-Stop?

- Myra Bambacus served as Acting Executive Director and continues in an Agency leadership role in support of GOS.
- Dr. Jeff de La Beaujardiere served as Portal Manager for the planning, requirements definition and development of a Portal based on an open standards architecture.
- Leslie Wollack, detailed from NASA, provides full-time detail for 1-Stop Outreach.
- NASA has open IPA slot for eventual Deputy Program Manager (t.b.d.).
- 3 of the 1-Stop Framework Data Themes have participating NASA experts.
- NASA provides direct monetary contributions to 1-Stop.

13. Enterprise Architecture: Is geospatial data a component of your enterprise architecture? Please provide a brief summary of how geospatial data fits into your enterprise architecture.

Geospatial data is the basis of the ESE Strategic Plan. Geospatial data is gathered, modeled, disseminated and studied accordingly.

The Earth Science Enterprise architecture is depicted in the figure below. It is based on the approach of enabling the assimilation of Earth Science model and remote sensing mission outputs to serve as inputs to decision support systems. This is all premised, of course on open geospatial standards and interoperability.




14. Partnerships: What efforts are being taken to coordinate data and build partnerships at the field level for data collection and standards development? Identify partnerships and data sharing activities with other federal agencies, state, local, and tribal governments and other entities.

- NASA has created and leads the FGDC Geospatial Applications and Interoperability WG (see Part B, below).
- NASA GIO holds Agency membership in Open GIS Consortium.
- NASA GIO provides agency representation in ISO Technical Committee 211 Geographic Information/Geomatics.
- NASA participates actively in Geospatial One-Stop (see #12, above).
- NASA ESE Applications Division has various ongoing partnerships and data-sharing activities.
- NASA's Facilities Engineering Division participates in the CAD/GIS Technology Center.

15. Concerns or Lessons Learned: Are there areas or issues regarding spatial data that require attention, or lessons learned that you would like to share with others? Please describe.

In less than a year, the Terra instruments have doubled NASA's Earth Science data holdings. Thus, volumes of Data are of concern. Also, Data visualization is another area of importance to NASA, in terms of advancing the technology. NASA Earth Science Enterprise will continue to support the use of open, consensus standards in the development of information systems handling geospatial data